

16208000 SOUTH FORK KAUKONAHUA STREAM AT EAST PUMP RESERVOIR, NEAR WAHIAWA

LOCATION.--Lat 21°29'32", long 157°59'54", Hydrologic Unit 20060000, on right bank on upstream side of dam at East Pump Reservoir, 2.3 mi east of Wahiawa Post Office, and 7.1 mi north of Waipahu.

DRAINAGE AREA.--4.04 mi².

PERIOD OF RECORD.--July 1957 to June 1963, water years 1963-64 (annual maximum), July 1964 to current year.

GAGE.--Water-stage recorder and Ogee-type dam control. Datum of gage is 860.35 ft above mean sea level (from U.S. Coast and Geodetic Survey trig station).

REMARKS.--Records computed by S.T.M. Young. Records good except for periods of no gage height record which are poor. Prior to 1960, water was diverted from reservoirs upstream of station for use at Schofield Barracks.

AVERAGE DISCHARGE.--40 years (water years 1961-62, 1965-2002), 21.0 ft³/s (15,240 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,460 ft³/s, April 15, 1963, gage height, 11.33 ft, from rating curve extended above 1,100 ft³/s on basis of computation of peak flow over dam; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|-------|------|--------------------------------|------------------|
| Jan 27 | 0245 | 1,170 | 5.17 | May 6 | 0730 | *3,910 | *9.34 |
| Jan 29 | 0200 | 1,330 | 5.47 | | | | |

Minimum discharge, 1.5 ft³/s, Apr. 12, 13, gage height, 1.26 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|-------|
| 1 | e33 | e18 | 5.9 | 4.6 | 36 | 3.8 | 3.4 | 4.1 | 2.7 | 29 | 3.7 | 6.1 |
| 2 | e5.4 | e17 | 7.3 | 4.3 | 39 | 3.6 | 3.1 | 3.1 | 2.5 | 22 | 3.0 | 6.4 |
| 3 | e3.8 | e25 | 5.1 | 4.2 | 18 | 3.4 | 2.9 | 2.5 | 2.4 | 10 | 3.5 | 6.7 |
| 4 | e7.5 | e29 | 4.9 | 3.9 | 103 | 3.4 | 2.8 | 52 | 2.7 | 6.9 | 5.1 | 6.1 |
| 5 | e96 | e27 | 8.2 | 3.9 | 45 | 10 | 2.7 | 50 | 2.8 | 5.2 | 20 | 4.0 |
| 6 | e9.7 | e58 | 12 | 3.9 | 19 | 104 | 2.5 | 942 | 2.3 | 5.6 | 8.6 | 4.2 |
| 7 | e56 | e70 | 6.2 | 3.6 | 15 | 140 | 2.4 | 207 | 2.5 | 11 | 51 | 4.9 |
| 8 | e10 | e49 | 5.9 | 3.7 | 27 | 18 | 2.2 | 60 | 5.0 | 66 | 19 | 4.4 |
| 9 | e7.1 | e14 | 24 | 4.2 | 20 | 13 | 2.0 | 37 | 2.6 | 20 | 8.7 | 5.7 |
| 10 | e28 | e12 | 7.6 | 4.8 | 11 | 57 | 1.8 | 26 | 2.6 | 19 | 12 | 6.9 |
| 11 | e47 | e12 | 5.9 | 4.7 | 9.9 | 8.8 | 1.7 | 16 | 61 | 11 | 12 | 5.9 |
| 12 | e31 | e12 | 7.0 | 4.6 | 9.3 | 6.6 | 1.6 | 14 | 11 | 7.7 | 18 | 3.4 |
| 13 | e74 | e18 | 38 | 4.5 | 67 | 13 | 1.5 | 16 | 6.3 | 6.2 | 15 | 3.2 |
| 14 | e16 | e10 | 47 | 4.7 | 13 | 10 | 1.6 | 11 | 3.9 | 5.6 | 7.2 | 9.2 |
| 15 | e14 | 9.9 | 33 | 4.9 | 22 | 30 | 1.7 | 8.8 | 3.0 | 5.5 | 5.4 | 13 |
| 16 | e51 | 8.9 | 12 | 5.0 | 12 | 55 | 1.7 | 7.2 | 4.9 | 5.2 | 4.6 | 19 |
| 17 | e12 | 8.1 | 11 | 5.1 | 8.5 | 72 | 4.0 | 6.3 | 4.2 | 6.0 | 4.1 | 11 |
| 18 | e9.8 | 7.4 | 11 | 4.5 | 7.6 | 16 | 5.4 | 9.2 | 11 | 10 | 3.8 | 5.0 |
| 19 | e8.5 | 6.8 | 23 | 4.7 | 7.0 | 9.5 | 4.6 | 37 | 27 | 17 | 4.0 | 16 |
| 20 | e7.5 | 6.3 | 18 | 6.9 | 6.4 | 7.7 | 38 | 18 | 9.7 | 9.8 | 4.9 | 6.0 |
| 21 | e7.3 | 5.7 | 12 | 75 | 5.9 | 6.7 | 20 | 8.8 | 13 | 6.6 | 3.9 | 4.0 |
| 22 | e7.7 | 5.3 | 8.3 | 39 | 5.4 | 6.0 | 4.6 | 7.1 | 39 | 18 | 3.1 | 3.3 |
| 23 | e6.6 | 5.0 | 21 | 7.5 | 5.2 | 5.5 | 2.7 | 5.8 | 14 | 5.9 | 3.0 | 2.9 |
| 24 | e5.7 | 4.7 | 28 | 4.2 | 4.9 | 5.2 | 2.1 | 5.1 | 23 | 5.7 | 19 | 2.6 |
| 25 | e6.8 | 4.4 | 9.8 | 3.3 | 5.2 | 5.0 | 9.9 | 4.6 | 9.1 | 6.5 | 5.2 | 2.4 |
| 26 | e7.1 | 4.5 | 7.3 | 78 | 5.2 | 5.4 | 82 | 4.2 | 6.4 | 4.4 | 4.3 | 2.3 |
| 27 | e33 | e71 | 6.5 | 209 | 4.3 | 4.6 | 48 | 4.0 | 5.2 | 5.9 | 9.3 | 2.1 |
| 28 | e49 | e7.4 | 5.9 | 210 | 3.9 | 4.3 | 9.1 | 3.7 | 4.6 | 5.4 | 20 | 1.9 |
| 29 | e8.4 | 8.1 | 6.5 | 373 | --- | 4.9 | 9.5 | 3.5 | 4.0 | 8.8 | 9.4 | 1.9 |
| 30 | e10 | 6.4 | 5.7 | 70 | --- | 4.6 | 11 | 3.2 | 3.8 | 6.9 | 17 | 2.0 |
| 31 | e25 | --- | 5.5 | 83 | --- | 3.8 | --- | 2.9 | --- | 5.2 | 12 | --- |
| TOTAL | 693.9 | 540.9 | 409.5 | 1242.7 | 535.7 | 640.8 | 286.5 | 1580.1 | 292.2 | 358.0 | 319.8 | 172.5 |
| MEAN | 22.4 | 18.0 | 13.2 | 40.1 | 19.1 | 20.7 | 9.55 | 51.0 | 9.74 | 11.5 | 10.3 | 5.75 |
| MAX | 96 | 71 | 47 | 373 | 103 | 140 | 82 | 942 | 61 | 66 | 51 | 19 |
| MIN | 3.8 | 4.4 | 4.9 | 3.3 | 3.9 | 3.4 | 1.5 | 2.5 | 2.3 | 4.4 | 3.0 | 1.9 |
| AC-FT | 1380 | 1070 | 812 | 2460 | 1060 | 1270 | 568 | 3130 | 580 | 710 | 634 | 342 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2002, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 17.2 | 27.4 | 22.0 | 20.4 | 16.3 | 25.4 | 29.4 | 20.8 | 16.9 | 25.5 | 18.2 | 14.4 |
| MAX | 38.0 | 107 | 61.7 | 55.2 | 99.7 | 104 | 90.1 | 64.9 | 46.1 | 60.9 | 53.7 | 35.7 |
| (WY) | 1967 | 1966 | 1988 | 1989 | 1969 | 1980 | 1963 | 1963 | 1987 | 1989 | 1967 | 1990 |
| MIN | 0.32 | 3.54 | 2.07 | 0.38 | 0.11 | 0.66 | 2.45 | 0.51 | 3.40 | 4.25 | 3.04 | 1.43 |
| (WY) | 1985 | 1963 | 1990 | 1986 | 1986 | 1983 | 1992 | 1992 | 1968 | 1968 | 1971 | 1975 |

HAWAII, ISLAND OF OAHU

16208000 SOUTH FORK KAUKONAHUA STREAM AT EAST PUMP RESERVOIR, NEAR WAHIAWA--Continued

| SUMMARY STATISTICS | FOR 2001 CALENDAR YEAR | | FOR 2002 WATER YEAR | | WATER YEARS 1961 - 2002 | |
|--------------------------|------------------------|-------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL | 5488.77 | | 7072.6 | | 21.0 | |
| ANNUAL MEAN | 15.0 | | 19.4 | | 37.2 | |
| HIGHEST ANNUAL MEAN | | | | | 11.1 | |
| LOWEST ANNUAL MEAN | | | | | 1982 | |
| HIGHEST DAILY MEAN | 220 | Jun 5 | 942 | May 6 | 1050 | Feb 1 1969 |
| LOWEST DAILY MEAN | 0.37 | Feb 8 | 1.5 | Apr 13 | 0.00 | Dec 24 1960 |
| ANNUAL SEVEN-DAY MINIMUM | 0.52 | Feb 2 | 1.7 | Apr 10 | 0.00 | Jan 19 1977 |
| ANNUAL RUNOFF (AC-FT) | 10890 | | 14030 | | 15240 | |
| 10 PERCENT EXCEEDS | 38 | | 41 | | 48 | |
| 50 PERCENT EXCEEDS | 8.4 | | 6.9 | | 8.9 | |
| 90 PERCENT EXCEEDS | 2.3 | | 3.0 | | 1.9 | |

e Estimated

